AMENDMENTS TO THE DRAWINGS

The three attached drawing sheets include amended FIGURES 1-3 and replace the original three sheets that included FIGURES 1-3 as originally filed. In FIGURES 1 and 2, second shell 47 and yoke 50 are amended to show a threaded interface therebetween. Also, in FIGURE 2, the cursive, lower-case letter "l" denoting the effective magnetic length is revised to a capital letter "L" to be consistent with the amendments to the specification and the claims in the preliminary amendment presented at the time the application was filed. FIGURE 3 is amended to show a threaded interface between the second shell 47' and the yoke 50'.

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REMARKS

Claims 10-30 are pending in the present application, of which Claim 10 is independent. The Office Action objected to the specification for certain informalities. The Office Action also objected to Claim 10 for certain informalities. Claims 10-30 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Office Action notes, however, that Claims 10-30 would be allowable if rewritten or amended to overcome the rejections(s) under 35 U.S.C. § 112, first paragraph, as well as the other various objections set forth.

Objections to the Specification

In the Office Action, the Examiner asserted that, with regard to the description "the yoke. . . is. . . moveable relative to said second shell" (page3, third full paragraph), there is "inadequate support for the yoke 50 movable relative to the second shell 47 to adjust the length of the recess in the second shell, because there are no screw threads on the outside of the second shell, and it is not otherwise evident how the yoke thus moves relative to the second shell." The Examiner further stated in the same paragraph that "magnetically effective length l" should be changed to -- effective magnetic length-- followed by a lower-case, cursive "l."

Written Description

There is a strong presumption that an adequate written description of the claimed invention is present when the application is filed. *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976) ("we are of the opinion that the PTO has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims"). As discussed below, applicants respectfully submit that a person of skill in the art would recognize a description of the claimed subject matter in the originally filed specification.

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As a preliminary matter, applicants note that the application as originally filed on May 13, 2005, included Claims 1-9. These claims were thereafter canceled by preliminary amendment and substituted with Claims 10-30. As stated in MPEP § 2163, "it is now well accepted that a satisfactory description may be in the claims or any other portion of the originally filed specification." Canceled Claim 1 recited a solenoid plunger system similar to that of Claim 10, characterized, in part, as follows:

> . . . the casing (42, 42', 43, 43', 44, 44', 47, 47', 50, 50') comprises a second shell (47, 47') of high magnetic permeability between the first shell (42, 42') and the yoke (50, 50'), wherein said second shell (47, 47') comprises at least one recess (47a, 47a'), in particular in the shape of an annular groove, on its side facing away from the core (48, 48'), for focusing magnetic field lines M from the yoke (50, 50') onto the core (48, 48'), and in that in the region of the recess (47a, 47a') of said second shell (47, 47'), *the yoke and/or an adjustment member (51, 51')*, in particular in the form of an adjustment ring, of high magnetic permeability *is/are moveable relative to said second shell (47, 47')*, for adjusting the magnetically effective length l of the recess (47a, 47a') of the second shell (47, 47').

Thus, the feature that the yoke is movable relative to the second shell was originally disclosed and claimed and is therefore part of the original disclosure. The Office Action (page 2) acknowledges a similar supporting disclosure found in the third full paragraph of page 3 of the present application ("the yoke. . . is. . . moveable relative to said second shell"). Further, a person of skill in the art would readily recognize the purpose of having the yoke be movable relative to the second shell from the following:

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ii) In addition, a desired quantitative connection between a cycle ratio and a mixing pressure can be set by way of the adjustment ring 51, in that a tool (not shown) is inserted into the second recess 51b of said adjustment ring 51 so as to rotate the adjustment ring 51 further into, or out of, the iron core 48. In this arrangement, the size of the overlap of the recess 47a in the second shell 47 is adjusted by the adjustment ring 51, which provides a guide of the magnetic field lines M and thus adjustment of the magnetomotive force of the solenoid plunger system 4 according to the invention, as is shown in the enlargement of section A of Figure 1 in Figure 2. *In other words, the effective magnetic length L of the recess 47a in the second shell 47, i.e. of the magnetic impedance, for adjusting the magnetomotive force of the solenoid plunger system 4, is made possible.*

(Present application, page 7, first paragraph, as amended herein; emphasis added).

To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention at the time the application was filed. See, e.g., *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563, 19 USPQ2d at 1116. It is clear that the original specification discloses adjusting the magnetomotive force of the solenoid plunger system 4. One disclosed method for doing so comprises changing the effective magnetic length L of the recess 47a by adjusting the size of the gap between the adjustment ring 51 and the iron core 48.

Applicants respectfully submit that a second method for adjusting the magnetomotive force of the solenoid plunger system 4, comprising moving the yoke relative to the second shell,

is also described in sufficient detail that one of skill in the art would reasonably conclude that the applicants had possession of the claimed subject matter. The specification clearly states that "the yoke... is... moveable relative to said second shell" (page 3, third full paragraph). Further, FIGURE 2 shows the yoke 50 disposed on the second shell 47 such that the yoke 50 partially overhangs the recess 47a of the second shell 47. One of skill in the art would readily recognize from the present application that adjusting the magnetomotive force of the solenoid plunger system 4 can be accomplished by selectively moving the yoke 50 to change the amount of contact between the yoke 50 and the second shell 47, thereby increasing or decreasing the number of magnetic field lines M passing from the yoke 50 to the core 48 through the second shell 47. This is especially clear because there is no other disclosed or intuitive reason to include such a feature. The adjustability of the yoke 50, the core 48 and/or an adjustment member (e.g., adjustment ring 51) relative to the second shell 47 thus enables the effective magnetic length L to be finely adjusted.

FIGURE 2 is presently amended to show a threaded interface between the yoke 50 and second shell 47. This is consistent with the movable interfaces between the second shell 47 and the adjustment ring 51 and between the second shell 47 and the iron core 48. Applicants note that one of skill in the art would readily observe that the yoke and the second shell would be made movable relative to each other at least in the same manner as these other movable structures.

The above-noted amendments to the specification and drawings merely clarify the original disclosure to more plainly state what would be readily understood by a person of skill in the art. Accordingly, applicants respectfully submit that the amendments to the specification and drawings add no new matter to the application.

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"Magnetically effective length"

In the Office Action, the Examiner stated that "magnetically effective length l" should be changed to "effective magnetic length" followed by a cursive, lower-case letter "l" in order to prevent "l" from being printed in bold face in the printed patent and to be consistent with FIGURE 2. The specification is presently amended to replace all instances of "magnetically effective length l" with "effective magnetic length L." Further, FIGURE 2 is presently amended to be consistent with the specification.

Claim Objections

In the Office Action, the Examiner objected to Claim 10, stating that the element "magnetically effective length L" requires correction. This element of Claim 10 has been amended to read "effective magnetic length L".

Claim Rejections under 35 U.S.C. § 112, first paragraph

Claims 10-30 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. More specifically, the Examiner asserted that Claim 10 contains subject matter that was not described in the specification in such a way as to reasonably convey to one of skill in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In light of the above-noted amendments to the specification, Claim 10 is presently amended to recite the following:

> ... wherein the casing includes a second shell of high magnetic permeability between the first shell and the yoke, said second shell comprising at least one recess on its side facing away from the core for focusing magnetic field lines M from the yoke onto the core, and in the region of the recess of said second shell, the yoke, the core, and/or an adjustment member of high magnetic permeability is/are moveable

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relative to said second shell, for adjusting the effective magnetic length L of the recess of the second shell.

As discussed above, the specification as originally filed clearly discloses the feature in which moving the yoke relative to the second shell, as well as moving the core and/or moving the adjustment member relative to the second shell, changes the magnetically effective length L of the recess of the second shell. These features serve to accomplish the stated purpose of "adjusting the magnetomotive force of the solenoid plunger system 4" (page 7, first paragraph). In light of these originally disclosed features, applicants respectfully submit that the subject matter of Claim 10 is sufficiently described in the specification to comply with the requirements of 35 U.S.C. § 112, first paragraph. Claim 10 should be allowed.

Claims 11-30, which depend either directly or indirectly from Claim 10, should also be allowed, both for their dependence on an allowable base claim as well as for the additional subject matter they present.

Additional Claim Amendments

Claim 18 has been amended to replace "magnetically effective length l" with "effective magnetic length L". Claim 24 has been amended to depend from Claim 25 instead of Claim 22 in order to provide a proper antecedent basis for "the plain bearing."

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CONCLUSION

In light of the foregoing amendments and remarks, applicants respectfully submit that Claims 10-30 are in condition for allowance. An early and favorable action issuing these claims is respectfully solicited. If the Examiner has any questions, he is invited to contact the undersigned counsel by telephone at 206.695.1712.

Respectfully submitted,

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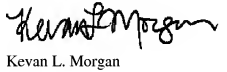

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